

Abstract

A method is provided for manufacturing a semiconductor device with a highly controlled impurity layer without influence from the heat treatment involved in epitaxial growth. The method comprises: forming a dummy gate layer above a semiconductor substrate; forming a spacer layer closely adjacent to each side of the dummy gate layer; selectively forming a silicon layer by epitaxial growth above the semiconductor substrate; forming a gate electrode after removing the dummy gate layer; forming a source/drain region by introducing an impurity into the semiconductor substrate through the silicon layer; and changing the silicon layer into silicide.